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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/413,821  
Filing Date: October 07, 1999  
Appellant(s): KELLER, PHILIP

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Gene Z. Rubinson  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 8/24/09 appealing from the Office action mailed 3/4/09.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al., Cheng hereinafter (US patent number 6,377,666, of a record).  
Cheng teaches a transceiver unit (fig. 1B) having a transmitter (115) and receiver (117) connected to existing residential wiring (see abstract), where the transmitting section comprising: a line driver (207) for transmitting signal over the existing twisted wires being controlled by a controller (113 in fig. 1B and 201 in figure 2); said controller controlling the power level of the

line driver through elements 203 and 205 according to the power level for transmitting the signal, high and low power levels (DLC) as in claims 1 and 3.

Further to claims 2 and 4 Cheng also teaches that;

the detection of the power level is determined by the controller once the line circuit is activated (see col. 4, lines 40-50) and reads on the claimed controlling during the initialization of the transceiver in claim 2; the system of Cheng is to accommodate the need of home networking, including computers and printer to share the existing wire line and reads on the claimed specification HPNA in claim 4; and the receiver (117) having a line receiver (209) for receiving signal as in claim 8.

What Cheng fails to teach is that the controller having a comparator for comparing the controlled value levels with a predetermined threshold value in order to generate the driving high and low power level as in claim 1.

However, it is obvious to one of an ordinary skill in the art that the controller of Cheng to have a comparator for generating the high and low power to accommodate two modes of operation (see figs 4A and 4B and col. 8) and control the DC level of the signal to be transmitted through existing telephone line at the time the invention was made.

#### **(10) Response to Argument**

4. In response to Applicant's argument that:

The Administrative Procedures Act (APA) mandates the Patent Office to make the necessary findings and provide an administrative record showing the evidence on which the findings are based, accompanied by the reasoning in reaching its conclusions. See *In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001); *In re Gartside*, 203 F.3d 1305, 1314, 53 USPQ2d 1769, 1774 (Fed. Cir. 2000). In particular, the Patent Office must articulate

and place on the record the "common knowledge" used to negate patentability. *In re Zurko, id.*; *In re Lee*, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002).

The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention under any statutory provision always rests upon the Examiner. *In re Mayne*, 104 F.3d 1339, 41 USPQ2d 1451 (Fed. Cir. 1997); *In re Deuel*, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995); *In re Bell*, 991 F.2d 781, 26 USPQ2d 1529 (Fed. Cir. 1993); *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In rejecting a claim under 35 U.S.C. § 103, the Examiner is required to provide a factual basis to support the obviousness conclusion. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967); *In re Lunaford*, 357 F.2d 385, 148 USPQ 721 (CCPA 1966); *In re Freed*, 425 F.2d 785, 165 USPQ 570 (CCPA 1970). The record must present articulated reasoning with rational underpinnings to justify a conclusion of obviousness, *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 82 USPQ2d 1385(2007). It is respectfully submitted that the record does not establish a reasonable basis for concluding that claims 1 through 4 would have been obvious under 35 U.S.C. § 103.

The Office Action sets out the rejection of claims 1 through 4 at paragraph 4. Elements of Cheng are identified therein as follows: transceiver unit (transmitter 115, receiver 117), line driver 207, controller 113, DACs 203,205. It is recognized in the statement of the rejection that "[w]hat Cheng fails to teach is that the controller having a comparator for comparing the controlled value levels with a predetermined threshold value in order to generate the driving high and low power level as in claim 1." It is then concluded (last paragraph of page 3 of the Office Action) that such feature would have been obvious.

No rationale for this conclusion was stated. Moreover, the stated conclusion is directed to whether it would have been obvious to include a comparator in the Cheng controller to accommodate two modes of operation disclosed in Cheng, i.e., generating the high and low power modes. There is no discussion in the Office Action in explanation of why the Examiner believes that modification of the Cheng system in the manner proposed would have resulted in, or made obvious, the requirements of claim 1 and its dependent claims 2-4. No further explanation in support of the conclusion of obviousness is presented in paragraph 7 of the Office Action. Paragraph 8 of the Office Action, which purports to respond to the arguments such as included herein, appears unintelligible. Appellant can find nothing therein that significantly refutes patentability.

The control logic of Cheng does not compare a controlled value representing the DC level set at the output transmit terminal with a predetermined threshold signal to control the output driver until the controlled value is equal to the threshold level. It is submitted that, even if a comparator were to be added to the Cheng controller as proposed in the Office Action, a person of ordinary skill in the art, upon consideration of the entire Cheng disclosure, would not have found it obvious to set a DC level at an output terminal for supplying a transmit signal of a prescribed level to the residential twisted pair wiring, compare a controlled value representing the DC level with a predetermined threshold level, and control an output driver until the controlled value is equal to the threshold level, all as required by claim 1 and its dependent claims 2-4.

In response to Appellant's argument that there is no reasoning with a rational underpinning to justify the conclusion of obviousness, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation and what is lacking in the prior art of record is clearly stated as indicated in the last office action and as repeated here in this office action, i.e., the logic unit should have a comparator for generating the power level shown in figures 4A and 4B, see upper and low voltage levels. Therefore, the logic unit should compare the desired voltage value according to the high and low voltage levels, claimed threshold, in order to generate the signal to control the driver.

It must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

As to Appellant's argument that the control logic does not compare a controlled value representing the DC set at the output terminal, the office action states clearly that the art in which the Examiner relied on does not show that the control logic for controlling the two mode of power level according to the signal compared to a threshold. However, such generating of a control signal should be compared with a desired value including a threshold value as shown in

figures 4A and 4B. Therefore, the control logic have to have a comparator with a desire value or threshold in order the driver unit to drive the proper signal level to be transmitted depending on the condition of the transmission line.

Examiner would like to bring Appellant's attention to refer to figures 4A and 4B regarding peak-to-peak voltage levels (claimed threshold) shown and disclosed. If the given peak-to-peak values (claimed threshold) set in figures 4A and 4B were not put in consideration, first, the system would not be able to function as intended, i.e., will not recognize the error that drives the line driver; second, the system would not be able to recognize whether the system should be able to function according to the first or second mode of operations. Examiner would like to bring the attention of the Appellant again to refer page 3, lines 1-27, page 4, lines 27-51 and page 8, lines 45-55, where the logic control generator DLC under the control of receiver logic (not shown) should be able to compare what is acceptable or not acceptable peak-to-peak voltage level in order for the line driver to transmit high or low voltage level over the existing wire.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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